REMARKS

The Office Action dated March 10, 2006, has been received and carefully noted. In response to the Office Action, the above amendments to the claims and following remarks are submitted as a full and complete response thereto.

Claim 22 has been added. No new matter has been added, and no new issues are raised which require further consideration and/or search. Claims 1-16 and 20 have been allowed. Claims 17-19 and 21 are pending in the present application and respectfully are submitted for consideration.

Claims 17-19 and 21 were rejected under 35 U.S.C. §102(b) as allegedly being anticipated by U.S. Patent No. 5,442,342 to Kung. The rejection is traversed as being based on a reference that neither teaches nor suggests the novel combination of features clearly recited in independent claims 17 and 21.

Claim 17, upon which claims 18 and 19 are dependent, recites an authentication method for a terminal. The method includes receiving a set of challenges from a telecommunications network. The method also includes choosing one challenge from the set of challenges. The method also includes determining a response and a key based on the chosen challenge. The method also includes determining an authenticator based on the key corresponding to the chosen challenge. The method also includes transmitting the authenticator and the data unit to the telecommunications network. The data unit relates to the manner in which the authenticator is formed. The method also includes notifying the telecommunications network of the chosen challenge.

Claim 21 recites terminal for a telecommunications network. The terminal is configured to receive a set of challenges from a telecommunications network. The terminal is also configured to choose one challenge from a set of challenges. The terminal also is configured to determine a response and a key based on the chosen challenge. The terminal also is configured to determine an authenticator based on the key corresponding to the chosen challenge. The terminal also is configured to transmit the authenticator and the data unit to the telecommunications network. The data unit relating to the manner in which the authenticator is formed and notifies the telecommunications network of the chosen challenge.

As outlined below, Applicant submits that the cited reference of Kung does not teach or suggest the elements of claims 17-19 and 21.

Kung teaches a computer system that includes first and second terminals connected by a communication link. When a user approaches the first terminal and presents a coded card to a card reader, the computer verifies the authenticity of the card. If the card is authentic, the computer requests a password from the user and compares the password with a password stored on the coded card. If the password is authentic, the computer at the first terminal initiates communications with the computer at the second terminal and establishes a trusted path between the terminals after authentication protocols between the terminals is complete. The computer at the second terminal presents a set of challenges which the user responds to at the first terminal. The computer at the second terminal compares the pattern of response provided by the user

with a stored pattern of responses. The correct pattern of response includes some agreed upon wrong answers.

According to Kung, authentication involves three distinct phases. In the first phase, user passwords are generated by the computer system and encrypted on a coded card together with a message authentication code to prevent alterations prior to any access attempts. In the second phase, the user is required to correctly respond to a set of randomly selected authentication challenges. In the third phase, at random times during the session, the user is required again to respond to selected authentication challenges. See at least Col. 3, line 13-Col. 4, line 45.

Applicant submits that Kung simply does not teach or suggest each of the elements recited in the presently pending claims. Claim 17 recites, in part, receiving a set of challenges from a telecommunications network, choosing one challenge from the set of challenges and determining a response and a key based on the chosen challenge and determining an authenticator based on the key corresponding to the chosen challenge. Similarly, claim 21, in part, recites a terminal that is configured to receive a set of challenges from a telecommunications network, to choose one challenge from a set of challenges and to determine a response and a key based on the chosen challenge.

As noted above, Kung discloses that authentication challenges are selected at random by a computer system and transmitted to the user. In Kung, the user <u>is required to respond to the entire set of question.</u> Col. 4, lines 21-26 and Col. 6, lines 2-38 of Kung discloses that authentication depends on the correctness of the entire set of responses

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rather than on the response to a single question. In Kung, it is the sequence of correct and incorrect answers that is required to authenticate the user. As such, there is simply no teaching or suggestion in Kung of choosing one challenge from the set of challenges, as recited in claim 17. There is also no teaching or suggestion in Kung of a terminal that is configured to receive a set of challenges from a telecommunications network and to choose one challenge from a set of challenges, as recited in claim 21. In fact, Applicant submits that Kung teaches away from choosing one challenge from the set of challenges since Kung requires a sequence of responses to authenticate the user.
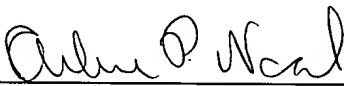
Furthermore, there is also no teaching or suggestion in Kung of determining a response and a key based on the chosen challenge and determining an authenticator based on the key corresponding to the chosen challenge, as recited in claims 17 and 21. In Kung, keys are only used in the first phase of the authentication and are not dependent on the challenges used in the second phase. Based on the distinctions present above, Applicant respectfully asserts that the rejection under 35 U.S.C. §102(b) should be withdrawn because Kung fails to teach or suggest each feature of claims 17 and 21 and hence, dependent claims 18 and 19 thereon.

As noted above, Applicant submits that each of claims 17-19 and 21 recite subject matter that is neither disclosed nor suggested by the cited references, either alone or in combination. Applicants respectfully request that all of claims 17-19 and 21 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

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Enclosures: Additional Claim Fee Transmittal (1)
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